

Notice of Allowability

Application No.

10/528,732

Examiner

Elias Desta

Applicant(s)

APPEL ET AL.

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 9/21/2006.
2. ☒ The allowed claim(s) is/are 15-19, 22-24, 26, 28-31 and 33.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Detailed Action

Response to Amendment

1. The examiner acknowledges the cancellation of claims 1-14, 20-21, 25, 27, 32 & 34 and accepts the amendment to the drawing.

Allowance

2. Claims 15-19, 22-24, 26, 28-31 and 33 are allowed. The following is an examiner's statement of reasons for allowance:

In reference to claims 15 and 29. Jean-Jumeau et al. (U.S. Patent 5,642,000, hereon Jean) teaches a method for determining a performance index for each power generating system (see Jean, Fig. 30). The method is provided to prevent voltage collapse in power generation system. The system includes measuring the load demands; calculating voltage collapse index (VCI); using VCI to identify weak areas before collapse will occur; determining the actual safety margin and shedding power in those portions of the power generating system that is identified as weak areas (see Jean, column 3, lines 18-36). The prediction is mainly done using what is called "decoupled, parameter dependent, nonlinear (DPDN) dynamic system. The system model can be represented by set of non-linear equations with a varying parameter that can be decoupled from the reminder of the equation (see Jean, column 5, lines 25-30). However, the method noted in Jean is not implemented using any sort of intelligent network or learning process.

Whereas, the claimed invention is an electrical power system that includes a power plant block and a computer system, coupled to receive data from the power plant block. The device includes an analysis model of a system of the power plant block configured to generate output data based on the data received from the power plant block, and implementing an algorithm based on artificial intelligence that searches for dependencies or correlations among data received by the device for integrating into the dynamic model as new correlations based on the searches to improve the dynamic model of the system thereby enabling provision of output data indicating changes in current or future operation behavior of the power plant block.

The remaining 16-19, 22-24, 26, 28, 30-31 and 33 are dependent upon claims 15 and 29 and contain further limitations.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- McCalley et al. (IEEE Article, 'A New Methodology for Determining Transmission Capacity Margin in Electric Power Systems') addresses the need in electric power industry for better approximation of transmission capacity margin between normal conditions and the system limitations

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Th (8:30-7:00).

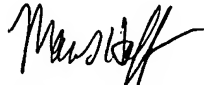
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elias Desta
Examiner
Art Unit 2857

- E.d

- November 22, 2006


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800